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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. CONFIRMATION NO. | |
|-----------------------------|----------------------------------|--------------------------------|--------------------------------------|---------------|
| 10/763,362 | 01/23/2004 | 01/23/2004 Mark William Bodmer | | 7568 |
| | 7590 11/12/201 AWRENCE & HAUG | | EXAMINER | |
| 745 FIFTH AV NEW YORK, N | ENUE- 10TH FL. | | HUYNH, PHUONG N | |
| NEW TORK, I | NI 10151 | | ART UNIT | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief

| Application No. | | Applicant(s) | |
|-----------------|--------------|---------------|--|
| | 10/763,362 | BODMER ET AL. | |
| | Examiner | Art Unit | |
| | PHUONG HUYNH | 1644 | |

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| The MAILING DATE of this communication appe | ars on the cover sheet with the c | correspondence add | ress |
| THE REPLY FILED <u>27 October 2010</u> FAILS TO PLACE THIS A | PPLICATION IN CONDITION FOR | R ALLOWANCE. | |
| 1. The reply was filed after a final rejection, but prior to or on application, applicant must timely file one of the following application in condition for allowance; (2) a Notice of Apperor Continued Examination (RCE) in compliance with 37 C periods: | replies: (1) an amendment, affidavit al (with appeal fee) in compliance | t, or other evidence, w with 37 CFR 41.31; or | hich places the (3) a Request |
| a) The period for reply expires 5 months from the mailing date b) The period for reply expires on: (1) the mailing date of this Ai no event, however, will the statutory period for reply expire la Examiner Note: If box 1 is checked, check either box (a) or (I MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f Extensions of time may be obtained under 37 CFR 1.136(a). The date of | dvisory Action, or (2) the date set forth in ter than SIX MONTHS from the mailing b). ONLY CHECK BOX (b) WHEN THE). | g date of the final rejection FIRST REPLY WAS FII | on. LED WITHIN TWO |
| have been filed is the date for purposes of determining the period of extunder 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | ension and the corresponding amount of hortened statutory period for reply original controls. | of the fee. The appropria nally set in the final Office | ate extension fee e action; or (2) as |
| The Notice of Appeal was filed on A brief in completing the Notice of Appeal (37 CFR 41.37(a)), or any exter Notice of Appeal has been filed, any reply must be filed with AMENDMENTS | sion thereof (37 CFR 41.37(e)), to | avoid dismissal of the | |
| 3. The proposed amendment(s) filed after a final rejection, be (a) They raise new issues that would require further cor (b) They raise the issue of new matter (see NOTE below (c) They are not deemed to place the application in better the second se | isideration and/or search (see NOT w); | TE below); | |
| appeal; and/or (d) ☐ They present additional claims without canceling a c NOTE: (See 37 CFR 1.116 and 41.33(a)). | orresponding number of finally reje | ected claims. | |
| 4. ☐ The amendments are not in compliance with 37 CFR 1.12 5. ☐ Applicant's reply has overcome the following rejection(s): | | | |
| 6. Newly proposed or amended claim(s) would be all non-allowable claim(s). 7. For purposes of appeal, the proposed amendment(s): a) [| · | • | - |
| how the new or amended claims would be rejected is prov The status of the claim(s) is (or will be) as follows: Claim(s) allowed: <u>None</u> . Claim(s) objected to: <u>None</u> . Claim(s) rejected: <u>1,18,29,31 and 37</u> . Claim(s) withdrawn from consideration: <u>30,32 and 33</u> . AFFIDAVIT OR OTHER EVIDENCE | ided below or appended. | The efficient and all c. | |
| The affidavit or other evidence filed after a final action, but because applicant failed to provide a showing of good and was not earlier presented. See 37 CFR 1.116(e). | | | |
| 9. The affidavit or other evidence filed after the date of filing a entered because the affidavit or other evidence failed to of showing a good and sufficient reasons why it is necessary | vercome <u>all</u> rejections under appea | l and/or appellant fail: | s to provide a |
| 10. | n of the status of the claims after er | ntry is below or attach | ed. |
| The request for reconsideration has been considered but <u>See Continuation Sheet.</u> | | condition for allowan | ce because: |
| 12. ☐ Note the attached Information <i>Disclosure Statement</i> (s). (13. ☐ Other: | PTO/SB/08) Paper No(s) | | |
| | /Phuong Huynh/ Primary Examiner, Art U | nit 1644 | |

Continuation of 11. does NOT place the application in condition for allowance because:

The new matter rejection of Claims 1, 18, 29 and 31 stand rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

Applicants' arguments filed October 27, 2010 have been fully considered but are not found persuasive. Applicant's position is that the specification recites that the first sequence may comprise "a polypeptide that is capable of binding to a MHC class II molecule." Specification, p. 12, 11.17-19. The specification also indicates the first sequence may "take the form of an antibody to an APC surface molecule." Id., p.13, 11.12-13. Given that a MHC class II molecule is an APC surface molecule, the skilled artisan would recognize that the specification supports an antibody (or binding fragment thereof) that binds to an MHC class II molecule.

Contrary to applicants' assertion that that the specification indicates the first sequence may take the form of antibody to an APC surface molecule such as MHC class II molecule, the paragraph at page 12 reproduces below:

"The first sequence is capable of targeting a second sequence to an APC for presentation to a TCR. In a preferred embodiment the first sequence comprises a polypeptide that is capable of binding to a MHC class II molecule. Preferably the first sequence is or is derived from a superantigen and comprises the MHC class II molecule binding domain thereof. Preferably the first sequence does not include the TCR binding domain of the superantigen.", see page 12, lines 16-21.

Said paragraph discloses that the first sequence that binds to MHC class II molecule is a superantigen, not an antibody as argued. Furthermore, the specification at page 13 discloses "In another embodiment the first sequence comprises a polypeptide which is capable of binding to another APC surface molecule. Such APC molecules include: CD205 (DEC205), CD204 (Scavenger receptor), CD14, CD206 (Mannose receptor), TLRs, Langerin (CD207), DC-SIGN (CD209), Fc), receptor 1 (CD64) and Fc), receptor 2 (CD32), CD68, CD83, CD33, CD54 and BDCA-2.3.4."

"It will be appreciated that the first sequence may therefore take the form of an antibody to an APC surface molecule. In a preferred embodiment the antibody is generated against the APC extracellular domain of the APC surface molecule, or a fragment thereof. The production of antibodies is described in for example Kohler and Milstein (1975) Nature 256:495-497." Again, there is no mentioned of MHC molecule and antibody that binds to such.

Finally, the claims and the specification as originally filed fail to provide written support for the claimed limitation of antibody or binding fragment thereof that binds to MHC class II molecule other than superantigen TSS1. No amendment shall introduce new matter into the claims. In re Rasmussen, 650 F.2d 1212, 211 USPQ 323 (CCPA 1981). For these reasons, the rejection is maintained.

Claims 1, 18, 29, 31 and 37 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat No 7,030,228 B 1 (filed November 15, 2000; PTO 892) in view of US application 2005/0137130 A1 (filed May 14, 2004; PTO 892).

Applicants' arguments filed October 27, 2010 have been fully considered but are not found persuasive. Applicant's position is that based on the teachings of the '130 publication, one of ordinary skill in the art would understand human Delta 1 to be used in the '130 publication as an inhibitor of Notch signaling. See, e.g., '130 publication, 0066-67, 0070-71, 0094,1099-1102. However, this teaches away from the instant claims that recite that the second sequence or the Notch ligand (or a fragment thereof) retains Notch signaling activity. Thus, the '130 publication teaches away from the claimed invention. In addition, the skilled artisan could not have predicted, based on the teachings in the '130 publication, that the second sequence or Notch ligand of the invention would retain Notch signaling activity.

In response, the notch ligand of the '130 publication comprises the amino acid sequence of SEQ ID NO: 51, which is identical to the claimed SEQ ID NO: 40 in the second sequence in the fusion protein. Products of identical chemical composition cannot have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). See MPEP 2112.01. In this case, if applicant's Notch ligand retains Notch signaling activity, so is the reference notch ligand which comprises the exact amino acid sequence. If the reference Notch ligand does not retain Notch singlaing activity, neither is applicants' Notch ligand.

With respect to the argument that the '130 publication teach inhibitor of Notch signaling, while the '130 publication teaches the reference fragment has inhibitory activity of Notch signaling, the full-length sequence of SEQ ID NO: 51 still retains Notch signaling activity because the term "or" is recited in claim 1. For these reasons, the rejection is maintained.

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